



Date: June 16, 1982

Subject: Evaluation of Ashland Petroleum Pitch

From/Location: E. L. Cambridge

To/Location: W. A. Hoffman/Louisville

With reference to our recent telephone conversation, R & D cannot, at this time, support or recommend a plant test of Ashland petroleum pitch at Columbia Falls.

In support of this conclusion I have enclosed a table (Attachment 1) of pitch, paste and baked carbon properties necessary for a satisfactory Soderberg anode operation, along with the comparable properties as measured by Columbia Falls, of Ashland pitch and resulting baked carbon. This information indicates that a A-240 pitched composite has properties outside the range of values that would likely result in an acceptable plant operation. The serious and significant departures are baked apparent density and compressive strength.

Granted, there is some question related to the test procedures employed. This, to me, underscores the need to re-do the tests under stringent control in our new facility in Tucson before making any judgement relating to a plant test. It is our intention to do this as soon as our facility is operative.

For your general information, I have also attached (Attachment 2) a general description of the laboratory evaluation procedure we would use. This also provides some explanation of what the specific tests mean and briefly describes some differences between the Soderberg and prebake operations, which make the Soderberg more susceptible to material related upsets. I hope you find this write up useful in putting our concerns into context.



E. L. CAMBRIDGE

ELC:pm

Attachments

cc: F.N.Mudge/Louisville
J.G.Kaufman/Louisville
D.Ryan/Columbia Falls
S.S.Jones
D.S.Moran